AMENDMENT UNDER 37 C.F.R. § 1.114(c) U.S. Appln. No. 10/805,220 (Q80490)

## REMARKS

Claims 17-23 are all of the claims presently pending in the application. Claims 18-19 and 23 are being cancelled; Claims 17 and 20-22 are hereby amended; and new Claims 24-26 are being added. Hence, the amendments to Claims 17 and 20-22; cancellation of Claims 18-19 and 23; and the addition of the new Claims 24-26 do not constitute new matter, and thus entry is respectfully requested.

On page 5 of the Office Action, the Examiner rejects Claims 17-19 and 23 under 35 U.S.C. § 102(b), as being anticipated by Hatalski et al.

Specifically, the Examiner states that Hatalski et al discloses the detection of neutralizing antibodies to p40, p23 and gp18 in BDV-infected rats, and testing for the presence of both IgG and IgM antibodies to recombinant and native BDV proteins using electrochemiluminescence (see page 741, second column thereof).

Additionally, the Examiner states that, in regard to the limitation in the claims in step (a), Hatalski et al uses an ECL kit (electrochemiluminescence) which makes use of a support sensitized with antigens. In regard to the limitation in step (b), i.e., reacting the BDV antigen polypeptide with the anti-BDV antibody in a sample from a living body, the Examiner contends that primary antibodies are expected to be from the sera of living subjects. Thus, the Examiner contends that the ECL assay described in Hatalski et al anticipates the claimed invention.

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For the following reasons, Applicants respectfully traverse the Examiner's rejection.

Hatalski et al does not disclose "a p10 BVD antigen polypeptide".

Accordingly, Applicants respectfully submit that the present invention is not taught or suggested in Hatalski et al, and thus request withdrawal of the Examiner's rejection.

On page 5 of the Office Action, the Examiner rejects Claims 17-23 under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Watanabe et al, and as further evidenced by Planz et al and in further in view of Hatalski et al and Carbone.

Specifically, the Examiner states that Yamaguchi et discloses a synthetic peptide-based electrochemiluminescence immunoassay (ECLIA) for anti-BDV p40 and p24 IgG antibodies in rat and horse serum. The Examiner contends that Yamaquchi et al teaches the synthesis of 13 peptides having hydrophilic BDV p40 and p24 sequences that were fixed onto microbeads, with Table 1 disclosing a p40 peptide that is identical to Applicants' SEQ ID NO:3 (PKRRLVDDADAMEDQDLY), and a p24 peptide that is identical to Applicant's SEQ ID NO:1 (QPVDQUI(DLRKNPS)). The Examiner further contends that rabbit anti-BDV p40 or p24 antiserum was The Examiner notes that detected by an ECLIA immunoassay. Yamaquchi et al is silent on the use of the antigen polypeptide of pl0 (SEQ ID NO:8) and the aspect of testing for both IgM and IqG antibodies.

However, the Examiner states that Watanabe et al discloses a study on the time course for appearance of antibodies to BDV antigens p40, p24, p18 and p10, and that Watanabe et al

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found that anti-p10 antibodies (IgG) were detected in sera of BDV-infected rats as early as anti-p40 and anti-p24 antibodies. Thus, the Examiner contends that it would have been obvious to include the detection of p10 in the method of Yamaquchi et al.

For the following reasons, Applicants respectfully traverse the Examiner's rejection.

Neither Yamaguchi et al nor Watanabe et al disclose a p10 BDV antigen polypeptide. Watanabe et al discloses a BVD p10 protein, but does not disclose "a p10 BVD antigen polypeptide".

Further, Planz et al, Hatalski et al and Carbone do not provide the deficiencies which exist therein.

Accordingly, Applicants respectfully submit that the present invention is not taught or suggested by Yamaguchi et al, alone or in combination with Watanabe et al, Planz et al, Hatalski et al or Carbone. Thus, Applicants request withdrawal of the Examiner's rejection.

In view of the amendments, cancellation and addition of the claims; and the remarks as set forth above, reconsideration and allowance of this application are respectfully requested.

The Examiner is invited to contact the undersigned at the below listed number on any questions which might arise.

Respect fally submitted,

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